

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
27 May 2004 (27.05.2004)

PCT

(10) International Publication Number
WO 2004/043140 A3

(51) International Patent Classification⁷: A61K 9/14

(21) International Application Number:
PCT/US2003/035250

(22) International Filing Date:
6 November 2003 (06.11.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/424,324 7 November 2002 (07.11.2002) US

(71) Applicant (for all designated States except US): AD-
VANCED BIONUTRITION CORP. [US/US]; 6430-C
Dobbin Road, Columbia, MD 21045 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): HAREL, Moti
[IL/US]; 2012 Masters Drive, Baltimore, MD 21209 (US).

(74) Agent: GARRETT, Arthur, S.; Finnegan, Henderson,
Farabow, Garrett & Dunner LLP, 1300 I Street, N.W.,
Washington, DC 20005-3315 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR,
CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU,
SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:
28 October 2004

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: NUTRACEUTICALS AND METHOD OF FEEDING AQUATIC ANIMALS

(57) Abstract: A delivery vehicle for bioactive agents and live probiotic microbes to aquatic animals protects the bioactive com-
pounds and microbes from digestion and destruction in the animal stomach. It provides for controlled release of bioactive agents and
live probiotic microbes to aquatic animals in the form of dry or wet beadlets with essential nutrients and attractants bound with sol-
uble starch and cross-linked alginate. The bioactive agents and live probiotic microbes can be bound with emulsified high-amylose
starch and embedded in the beadlets in the form of microparticles.

WO 2004/043140 A3